



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,094	10/09/2003	Poul Bach	10313.200-US	9214
25908	7590	12/19/2005	EXAMINER	
NOVOZYMES NORTH AMERICA, INC. 500 FIFTH AVENUE SUITE 1600 NEW YORK, NY 10110			METZMAIER, DANIEL S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/682,094	BACH ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Daniel S. Metzmaier	1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 9 Oct 2003 & 15 March 2004.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/9/2003.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

Claims 1-20 are pending.

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Guraya, US 6,737,099. Guraya (figure 2, and 7a-12c; column 7, lines 50 et seq; particularly lines 57 et seq, 60 et seq and 64; examples and claims) discloses contacting a cereal flours with aqueous media to form a slurry followed by deagglomeration of the starch granules by subjecting said slurry to high shearing via a microfluidizer and subsequently sizes the particles.

Guraya (column 7, lines 50 et seq) discloses the starting particle size may be up to 250 microns and said starting materials may be partially processed by treatment with an enzyme or alkali solvents. The enzyme would be expected to exist in the materials until consumed and reads on the claims which are open to other ingredients and lack any concentration limitations. Furthermore, said partially processed starches would be expected to contain at least trace amounts of dissolved sugar.

Guraya (column 8, lines 32 et seq) teaches subsequent to microfluidization the deagglomerated material is subjected to density based separation and optionally size-separation between the microfluidization and the density based separation. The claims do not exclude further steps.

The particles processed in the Guraya process would have inherently had a higher average particle strength than the starting material as a necessary result of

deagglomerating. It is reasonable to conclude the deagglomerated particles that are individual granules have a cohesive force binding the granule, which is more homogeneous and stronger than the cohesive force of the agglomerated particles based on their much lower points of contact.

To the extent the Guraya reference differs from the claims in the sufficiency of the process in a single example or the purpose of processing the materials or the density of the materials, Guraya teaches each of the process steps for their advantageous function. It would have been obvious to one having ordinary skill in the art at the time of applicants' invention to employ said process step for the functions taught in the Guraya reference. Some variation of the process as taught in the Guraya reference would have been within the level of one having ordinary skill in the art at the time of applicants' invention for the advantage of forming deagglomerated particles of uniform size.

Guraya (column 9, lines 12 et seq) further teaches coating the particles produced in the Guraya process with protein or other ingredients. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ conventional ingredients such proteins and other conventional ingredients to increase the density of the particles and thus also the strength thereof.

6. Claims 1-20 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USA Secretary of Department of Agriculture, WO 02/078457. WO 02/078457 corresponds to US 6,737,099 relied on above. WO 02/078457 is deemed to have the same disclosure but is prior art under 35

USC 102(a). The basis for this rejection is otherwise the same as above and said above basis based on the disclosure is incorporated herein.

7. Claims 1-3, 10-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Dijk et al, US 5,529,710. Van Dijk et al (abstract) discloses detergent paste for making detergent granules. Van Dijk et al (column 2, lines 60 et seq) discloses forming a paste by contacting with a liquid to form a paste followed by (lines 33-45) subjecting to high shear mixing. Van Dijk et al (column 14, lines 60-66) disclose sieving the particles to remove the fine particles. Van Dijk et al (column 12, lines 40-54) disclose additives including enzymes, fillers, and exemplify salts

Van Dijk et al differs from the claims in the characterization of the shear rate substantially avoiding agglomeration.

Applicants process step of subjecting to high shear at a rate substantially avoiding agglomeration would have been implicit to the final stages of granulation of the Van Dijk et al reference. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ high shear rate granulation and particle classification for the advantage of producing the desired particle size. Applicants do not define the specific shear rate in the claims rejected or the breadth of substantially avoiding agglomeration.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel S. Metzmaier  
Primary Examiner  
Art Unit 1712

DSM